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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,111	02/21/2002	Ting-Wah Wong	PSS.0029P7US	4390
21906	7590	10/16/2003	EXAMINER	
TROP PRUNER & HU, PC 8554 KATY FREEWAY SUITE 100 HOUSTON, TX 77024			NADAV, ORI	
			ART UNIT	PAPER NUMBER
			2811	

DATE MAILED: 10/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/081,111

Applicant(s)

WONG ET AL.

Examiner

ori nadav

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5, 7-24 and 26-37 is/are pending in the application.
- 4a) Of the above claim(s) 11-19 and 27-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-10, 20-24, 26 and 31-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_. 6) ☐ Other: \_\_\_\_\_

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### **DETAILED ACTION**

In view of the appeal brief filed on 7/27/2003, PROSECUTION IS  
HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of  
the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a  
reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be  
accompanied by a supplemental appeal brief, but no new amendments, affidavits  
(37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR  
1.193(b)(2).

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly  
claiming the subject matter which the applicant regards as his invention.

1. Claims 31-37 are rejected under 35 U.S.C. 112, second paragraph,  
as being indefinite for failing to particularly point out and distinctly claim the  
subject matter which applicant regards as the invention. The claimed limitations  
of a resistor acting as a high impedance relative to a junction capacitance within  
the triple well, as recited in claims 31 and 37, is unclear as to how an impedance  
can be compared to (being high relatively to) a capacitance.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2: Claims 1-5, 7-10, 20-24, 26 and 31-37, insofar as in compliance with 35 U.S.C. 112, are rejected under 35 U.S.C. 103(a) as being unpatentable over Momohara (6,055,655) in view of Lehongres (6,157,073), Ng (Complete guide to semiconductor devices, page 109) and Applicant Admitted Prior Art (AAPA).

Momohara teaches in figures 22A and 24 and related text a method comprising: forming a circuit element PMOS14 (figure 24) over a triple well 25-7, 22-7 in a substrate 10; and biasing a well of the triple well, forming a P-type well 25-7 in an N-type well 22-7 formed in the substrate, including biasing the N-type and P-type wells and providing a common bias potential to different wells, forming a complementary metal oxide semiconductor transistor over a triple well and biasing at least one of the wells of the triple well, forming a plurality of triple wells in the substrate and forming a circuit element over each of the triple wells, biasing at least one well of each of the triple wells through a common potential, wherein each of the potentials being applied to the wells.

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Momohara does not teach biasing at least one of the wells through a resistor and using the analog circuit as a radio frequency circuit.

Lehongres teaches in figure 4 and related text (column 3, lines 12-17 and 62-67) biasing a well 16 through a resistor R and supplying a biasing power supply voltage to the well. Lehongres further teaches that forming a biasing resistor between the power supply voltage and the well improves the noise filtering capabilities of the device. The resistor forms an RC cell with the stray capacitance of the well, wherein the RC cell filters the circuit noise.

AAPA teaches on page 1, lines 21-22 that a radio frequency circuit is an analog circuit.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a radio frequency circuit in Momohara's analog circuit, and to supply a biasing power supply voltage to Momohara's device through a resistor in order to use the device in its intended use, in an application which requires a radio frequency circuit, and in order to better filter the noise of the device, respectively. The combination is motivated by the teachings of Lehongres who points out the advantages of using a biasing resistor between the power supply voltage to the well (column 3, lines 62-67).

Regarding claims 4, 5, 10, 20, 21, 24, 34 and 35, Lehongres teaches that the value of the resistor and the size of the well determine the noise frequency to be filtered (column 4, lines 55-66). Therefore, correlating different resistor values with different well sizes provides better noise filtering capabilities of the device. It

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would have been obvious to a person of ordinary skill in the art at the time the invention was made to bias a first well through a first resistor with a first bias potential, and to bias a second well through a second resistor, and to couple the first bias potential to the first and second wells through a common trace in Momohara's device, in order to more effectively reduce the noise of the device.

Regarding claims 7, 26 and 36, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use resistors having a resistance greater than one hundred ohms in Momohara's device in order to use the device in an application which requires noise reduction for specific frequency values.

Regarding claims 2, 22 and 32, AAPA teaches that a radio frequency circuit comprises an inductor.

Regarding claims 31 and 37, the claimed limitations of a resistor acting as a high impedance relative to a junction capacitance within the triple well, these features are inherent in prior art's device, because prior art's structure is identical to the claimed structure.

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***Response to Arguments***

Applicant argues that it is unclear to the examiner how impedance can be compared to another impedance in the form of a capacitance.

It is not unclear to the examiner how impedance can be compared to another impedance in the form of a capacitance. It is unclear to the examiner how impedance can be compared to a capacitance, as recited in claims 31 and 37.

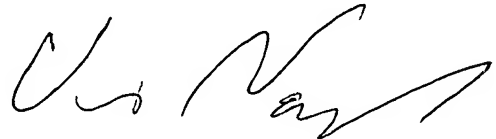
The rest of applicant's arguments with respect to claims 1-5, 7-10, 20-24, 26 and 31-37 have been considered but are moot in view of the new ground(s) of rejection.

Papers related to this application may be submitted to Technology center (TC) 2800 by facsimile transmission. Papers should be faxed to TC 2800 via the TC 2800 Fax center located in Crystal Plaza 4, room 4-C23. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Group 2811 Fax Center number is (703) 308-7722 and 308-7724. The Group 2811 Fax Center is to be used only for papers related to Group 2811 applications.

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Any inquiry concerning this communication or any earlier communication from the Examiner should be directed to *Examiner Nadav* whose telephone number is **(703) 308-8138**. The Examiner is in the Office generally between the hours of 7 AM to 4 PM (Eastern Standard Time) Monday through Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas, can be reached at **(703) 308-2772**.

Any inquiry of a general nature or relating to the status of this application should be directed to the **Technology Center Receptionists** whose telephone number is **308-0956**.



O.N.  
October 1, 2003

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